IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	Attorney Docket No.: **ASAIN0127**
	)	Confirmation No. 1488
Shuntaro YAMAZAKI et al.	)	
	)	Group Art Unit: 2671
Serial No.: 10/615,782	)	
	)	Examiner: Peter Pappas
Filed: July 10, 2003	)	
	)	
For: IMPLICIT FUNCTION RENDERING METHOD OF NONMANIFOLD...	)	Date: December 22, 2005

INFORMATION DISCLOSURE STATEMENT

MAIL STOP: AMENDMENT

United States Patent and Trademark Office
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, this Information Disclosure Statement in connection with the above-identified application is being filed in accordance with 37 C.F.R. §1.97(b):

- ☐ within three months of the filing date of this application (not a C.P.A.);
- ☐ within three months of the date of entry of the National Stage;
- ☐ before the mailing date of a first Office Action on the merits; or
- X before the mailing of a first Office Action on the merits of, after the filing of a Request for Continued Examination (RCE) under §1.114.

A copy of each non-U.S. document identified on the attached Form PTO/SB/08B are attached.

Document A relates to Polygonization of Implicate Surfaces. Document B relates to Introduction to Implicit Surface. Document C relates to Polygonization of Non-Manifold Implicit Surfaces. Document D relates to Two-Phase Perspective Ray Casting for Interactive Volume Navigation. Document E relates to High Quality Pre-Integrated Volume Rendeing Using Hardware-Accelerated Pixel Shading. Document F relates to A Generalized Marching Cubes Algorithm Based on Non-Binary Classifications. Document G relates to Fast Volume Rendering Using a Shear-Warp Factorization of the Viewing Transformation. Document H relates to Marching Cubes: A High Resolution 3D Surface Construction Algorithm. Document I relates to SGC: A Dimension-Independent Model for Pointsets with Internal Structures and Incomplete Boundaries. Document J relates to Direct 2-D Display of 3-D Objects. Document K relates to Using Particles to Sample and Control Implicit Surfaces. Document L relates to Nonmanifold Implicit Surfaces Based on Discontinuous Implicitization and Polygonization.

The above documents are cited in the present specification. Accordingly, no further comment with regard to the disclosures of these documents is believed to be required.

It is respectfully requested that the attached documents be considered and officially cited, and that the Examiner initial a copy of Form PTO/SB/08B, and return them to the undersigned to indicate that the documents have been considered.

It is believed that the present Information Disclosure Statement complies with the requirements of 37 C.F.R. §§ 1.97-8, but should the filing of this paper necessitate a fee, the Director is hereby authorized to charge the necessary fee to Deposit Account No. 50-1281.

Respectfully submitted,

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PTO/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
Application Number	10/615,782
Filing Date	July 10, 2003
First Named Inventor	Shuntaro YAMAZAKI
Art Unit	2671
Examiner Name	Peter PAPPAS
Attorney Docket Number	ASAIN0127

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	A	J. Bloomenthal, Polygonization of Implicit Surfaces, Computer Aided Geometric Design, 5:341-355, 1987	
	B	J. Bloomenthal, Introduction to Implicit Surface, Morgan Kaufmann Publishers, Inc., 1997	
	C	J. Bloomenthal and K. Ferguson, Polygonization of Non-Manifold Implicit Surfaces, SIGGRAPH '95, Pages 309-316, 1995	
	D	M. Brady et al., Two-Phase Perspective Ray Casting for Interactive Volume Navigation, Visualization 97, Pages 183-189, 1997	
	E	Klaus ENGEL et al., High Quality Pre-Integrated Volume Rendering Using Hardware-Accelerated Pixel Shading, In Eurographics/SIGGRAPH Workshop on Graphics Hardware '01, pages 9-16, 2001	
	F	H.C. Hege et al., A Generalized Marching Cubes Algorithm Based on Non-Binary Classifications, Technical Report, Konrad-Zuse-Zentrum fur Informationstechnik Berlin, 1997	
	G	Philippe Lacroute et al., Fast Volume Rendering Using a Shear-Warp Factorization of the Viewing Transformation, SIGGRAPH '94, Pages 451-458, 1994	
	H	W.E. Lorenson et al., Marching Cubes: A High Resolution 3D Surface Construction Algorithm, SIGGRAPH '87, pages 163-169, 1987	
	I	J. Rossignac et al., SGC: A Dimension-Independent Model for Pointsets with Internal Structures and Incomplete Boundaries, Geometric Modeling for Product Engineering, 1989	
	J	H. Tuy et al., Direct 2-D Display of 3-D Objects, IEEE Mag, Computer Graphics and Applications, 4 (10) : 29-33, 1984	

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 2

Complete if Known	
Application Number	10/615,782
Filing Date	July 10, 2003
First Named Inventor	Shuntaro YAMAZAKI
Art Unit	2671
Examiner Name	Peter PAPPAS
Attorney Docket Number	ASAIN0127

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	K	A.P. Witkin et al., Using Particles to Sample and Control Implicit Surfaces, SIGGRAPH '94, 1994	
	L	Shuntaro Yamazaki et al., Nonmanifold Implicit Surfaces Based on Discontinuous Implicitization and Polygonization, Geometric Molding and Processing, pages 138-146, 2002	

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